

PRESS RELEASE

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SMS group to supply two annealing and coating lines for electric steel strip to Shougang in China

Non-grain-oriented electric steel strip



With the two new lines, Shougang will enhance its production capacity of non-grain-oriented electric steel strip for electric

motors and generators.

Shougang Zhixin Qian'an Electromagnetic Material, China, has awarded an order to SMS group for the supply of two annealing and coating lines for electric steel strip. The lines will expand the annual production capacity of fully-finished non-grain-oriented electric steel strip with high silicon content at the existing production location in Hebei province by 360,000 tons. In both annealing and coating lines, the internal microstructure of the cold rolled material will be adjusted during the annealing process and the material then be provided with an insulating layer. The steel will mainly be used for the production of motors and generators to meet the increasing demand for efficient and effective electrification in China. SMS group is thus making a contribution to the mobility of the future. The contract was completely negotiated and concluded via digital media, due to travel restrictions. Commissioning of the lines is scheduled for 2022.

In addition to designing the mechanical and process equipment and to the manufacture of various core components, SMS group's supply package also includes the supervision of part of the local manufacturing scope and of equipment installation and commissioning. Furthermore, SMS group is to supply the electrical and automation system.

Due to its magnetic properties, electric steel strip, also called silicon steel strip, is widely used in electrical engineering. With its advantageous magnetic properties, it contributes to improve the energy efficiency in electrical systems and thus helps to save resources. In non-grain-oriented strip, the grain orientation is irregular so that the material features isotropic properties. It is therefore used in rotating machines such as electric motors and generators. The material is especially used for electric vehicles, where high-quality electric steel strip determines the efficiency of the drives.

In both lines, the process includes cleaning, annealing, coating and drying of the material. Therefore, the lines will feature, besides the terminal equipment, cleaning sections, annealing furnaces, coating sections and drying ovens. The terminal equipment will comprise

entry and exit sections as well as horizontal loopers.



Horizontal strip looper in an annealing and coating line for non-grain-oriented electric steel strip.

SMS group is a group of companies internationally active in plant construction and mechanical engineering for the steel and nonferrous metals industry. It has some 14,000 employees who generate worldwide sales of more than EUR 2.8 billion. The sole owner of the holding company SMS GmbH is the Familie Weiss Foundation.